SHEET – LOOPS

Q1 -write a C program to calculate some of first (n) natural numbers (1 ,2 ,3 ,...., n) using loops (done) ✓

Test Data :
Input the number : 5

Expected Output :

Summing : 15

Q2 - write a C program to print "welcome to embedded system " using for loop by two methods

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Q3 -display n terms and of the odd natural number and their sum

Test Data :
Input the number of terms : 10

Expected Output *:*

Odd terms : 1 3 5 7 9 11 13 15 17 19

The sum of odd terms : 100

Q4 Write a program in C to add positive integer numbers if the user enter the negative number break ,then display the sum of all positive integer numbers only.

Input number = 2

Input number = 4

Input number = -1

Exit from loop

Expected Output :

Sum = 6.

Q5- Write a program in C to calculate the positive of N numbers and skipped the negative numbers by continue statement.(done)

Test Data :
Input a counter =4

Input number = 1

Input number = -1

Plz enter the positive value

Input number = -2

Plz enter the positive value

Input number = 3

Expected Output :

Sum = 4

Q6 - Write a program in C to find the factorial of a given number using for loop.
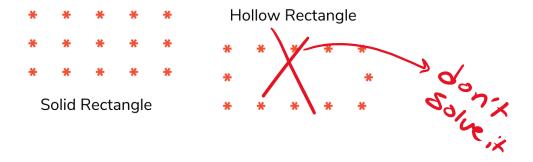
Input a number : 5

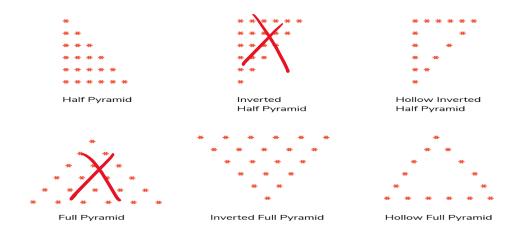Expected Output :

The Factorial of 5 is : 120

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Q7 – Write a program C to print a solid and hollow rectangle using stars

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*   *   *   *   *            Hollow Rectangle
*   *   *   *   *       *   *   *   *   *
*   *   *   *   *       *           *          don't
   Solid Rectangle      *   *   *   *   *       solve it
```

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Q8: Write a program C using stars To print the Pyramid patterns shown below

```
*                  * * * * *           * * * * * *
* *                * * * *             *         *
* * *              * * *               *       *
* * * *            * *                 *     *
* * * * *          *                   * *
* * * * * *
  Half Pyramid     Inverted            Hollow Inverted
                   Half Pyramid        Half Pyramid
```

```
         *         * * * * * * * * *        *
        * * *       * * * * * * *          * *
       * * * * *     * * * * *            *   *
      * * * * * * *   * * *              *     *
     * * * * * * * * *  *              * * * * * * *
   Full Pyramid     Inverted Full Pyramid   Hollow Full Pyramid
```

Q9: Write a program in C to display the sum of the series [9 + 99 + 999 + 9999 ...].

Test Data :

Input the number or terms :5

Expected Output :

9 99 999 9999 99999
The sum of the series = 111105

Q10: Write a C program that displays the n terms of square natural numbers and their sum.

1 4 9 16 ... n Terms

Test Data :

Input the number of terms : 5

Expected Output :

The square natural up to 5 terms are :1 4 9 16 25
The Sum of Square Natural Number up to 5 terms = 55

GOOD LUCK